**Keep Your Boat Afloat Rubric**

**Team Members:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Category** | **4** | **3** | **2** | **1** |
| **Plan** | Plan is neat with clear measurements and labeling for all components. | Plan is neat with clear measurements and labeling for most components. | Plan provides clear measurements and labeling for most components. | Plan does not show measurements clearly or is otherwise inadequately labeled. |
| **Construction – Care Taken** | Great care taken in construction process so that the structure is neat, attractive and follows plans accurately. | Construction was careful and accurate for the most part, but 1-2 details could have been refined for a more attractive product. | Construction accurately followed the plans, but 3-4 details could have been refined for a more attractive product. | Construction appears careless or haphazard. Many details need refinement for a strong or attractive product. |
| **Modification/Testing** | Clear evidence of troubleshooting, testing, and refinements based on data or scientific principles. | Clear evidence of troubleshooting, testing and refinements. | Some evidence of troubleshooting, testing and refinements. | Little evidence of troubleshooting, testing or refinement. |
| **Data collection** | Data taken several times in a careful, reliable manner. | Data taken twice in a careful, reliable manner. | Data taken once in a careful, reliable manner. | Data not taken carefully OR not taken in a reliable manner. |
| **Function** | Structure functions extraordinarily well, holding up under atypical stresses. | Structure functions well, holding up under typical stresses. | Structure functions pretty well, but deteriorates under typical stresses. | Fatal flaws in function with complete failure under typical stresses. |
| **Journal/Log Content** | Journal provides a complete record of planning, construction, testing, modifications, reasons for modifications, and some reflection about the strategies used and the results. | Journal provides a complete record of planning, construction, testing, modifications, and reasons for modifications. | Journal provides quite a bit of detail about planning, construction, testing, modifications, and reasons for modifications. | Journal provides very little detail about several aspects of the planning, construction, and testing process. |